P1 exposing hypocotyl tissue of immature cotton plants to a culture of transformation competent non-oncogenic Agrobacterium tumefaciens harboring a Ti plasmid having a T-DNA region including both a foreign chimeric gene and a selection agent resistance gene, both genes including appropriate regulatory sequences so as to be expressed in the cells of cotton plants;

C1 Cont

P1 culturing the exposed tissue in the presence of a selection agent for which the resistance gene encodes for resistance so as to select for plant cells transformed with the T-DNA region;

P1 inducing somatic embryo formation in the exposed tissue in culture; and

P1 regenerating the somatic embryos into whole cotton plants.

---

2 3. (Amended) The method of Claim [1] 2 1 wherein said exposing step is preceded by surface sterilization of cotton seeds followed by germination of said cotton seeds to form said immature cotton plants.

3 4. (Amended) The method of Claim [1] 2 1 wherein the hypocotyl tissue comprises pieces of hypocotyl explants which are removed from said immature cotton plants.

C2

4 5. (Amended) The method of Claim [1] 2 1 wherein the culture of Agrobacterium tumefaciens harbors a binary Ti plasmid system in which a virulence trait is carries on a plasmid separate from the plasmid carrying the T-DNA region.

---

11 12. (Amended) The method of Claim [1] 2 further including, after the step of exposing the tissue to said Agrobacterium tumefaciens, culturing the tissue on a medium containing at least one antibiotic toxic to said Agrobacterium tumefaciens but not toxic to cotton cells.

C3 NP NK

Remarks

By an Office Action dated Jan. 3,1989 in the file of the above-identified patent application, the Examiner in charge of this application has finally rejected all the pending claims under 35 U.S.C. §103 over a combination of

CLAIMS 5-14

24